IN THE CLAIMS

Please amend the claims as follows.

1. (Previously Presented) A method for transmitting data in a wireless channel comprising:

estimating throughput for a subsequent frame exchange using prefix adaptation, wherein prefix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity before transmission of one or more data frames to the remote entity, said adaptation information including information on how to adapt a data transmit parameter;

estimating throughput for the subsequent frame exchange using postfix adaptation, wherein postfix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity after transmission of one or more data frames to the remote entity;

selecting an adaptation technique from a group including prefix adaptation and postfix adaptation for use in the subsequent frame exchange based on said estimated throughput using prefix adaptation and said estimated throughput using postfix adaptation; and

performing the subsequent frame exchange using the selected adaptation technique.

2. (Previously Presented) The method of claim 1, wherein:

estimating throughput for a subsequent frame exchange using prefix adaptation includes dividing an amount of data expected to be successfully transferred during a frame exchange by an expected total duration of the frame exchange.

3.-4. (Canceled)

5. (Previously Presented) The method of claim 1, wherein:

estimating throughput for a subsequent frame exchange using prefix adaptation includes evaluating the following equation:

$$T_{prefix} = \frac{(1 - P_{collision}) \sum L_i . (1 - PER(L_i))}{P_{collision} . D_{RTS/TCTS} + (1 - P_{collision}) . D_{RTS/TCTS/DATA/TACK}}$$

where T_{prefix} is the estimated throughput using prefix adaptation, $P_{collision}$ is the probability that a collision occurs, L_i is the length of the ith packet of data that will be transmitted, $D_{RTS/TCTS}$ is the duration of a channel access request to send (RTS)-training clear to send (TCTS) sequence, $D_{RTS/TCTS/DATA/ACK}$ is the duration of a channel access RTS-TCTS-data-acknowledgement (ACK) sequence, $PER(L_i) = 1 - (1 - BER)^{(L_i \times 8)}$ is the probability that a packet of length L_i will be received correctly, and BER is the bit error rate.

6. (Previously Presented) The method of claim 1, wherein:

estimating throughput for a subsequent frame exchange using postfix adaptation includes evaluating the following equation:

$$T_{postfix} = \frac{(1 - P_{collision}) \sum L_i . (1 - PER(L_i))}{D_{DATA/TACK}}$$

where $T_{postfix}$ is the estimated throughput using postfix adaptation, $P_{collision}$ is the probability that a collision occurs, L_i is the length of the ith packet of data that will be transmitted, $D_{DATA/TACK}$ is the duration of a channel access data-training acknowledgement (TACK) sequence, $PER(L_i) = 1 - (1 - BER)^{(L_i \times 8)}$ is the probability that a packet of length L_i will be received correctly, and BER is the bit error rate.

7. (Previously Presented) The method of claim 1, wherein:

selecting an adaptation technique for use in the subsequent frame exchange includes selecting an adaptation technique having a higher estimated throughput.

8. (Previously Presented) The method of claim 1, wherein:

estimating throughput for a subsequent frame exchange using prefix adaptation includes evaluating a number of parameter combinations.

9. (Original) The method of claim 8, wherein:

evaluating a number of parameter combinations includes evaluating a number of combinations of fragmentation threshold, modulation type, and prefix adaptation.

10. (Previously Presented) The method of claim 1, wherein:

estimating throughput for a subsequent frame exchange using postfix adaptation includes evaluating a number of parameter combinations.

11. (Previously Presented) A method for use in a wireless network, comprising:

determining an adaptation validity duration as an estimate of the useful life of adaptation information;

when data is to be transferred, determining a time T since adaptation information was last obtained; and

when time T is greater than the adaptation validity duration, selecting prefix adaptation for a subsequent frame exchange.

12. (Previously Presented) The method of claim 11, further comprising:

when time T is less than the adaptation validity duration, choosing between prefix adaptation and postfix adaptation for the subsequent frame exchange based upon estimated throughput.

13. (Previously Presented) The method of claim 12, wherein:

choosing between prefix adaptation and postfix adaptation includes:

estimating throughput for the subsequent frame exchange using prefix adaptation;

estimating throughput for the subsequent frame exchange using postfix adaptation; and

selecting an adaptation technique having a higher estimated throughput.

14. (Original) The method of claim 11, wherein:

determining an adaptation validity duration includes monitoring variation of adaptation parameters as a function of time.

15. (Previously Presented) A method for use in a wireless network, comprising:

determining a time T since adaptation information was last obtained;

determining a postfix data transmission rate to be used when transmitting data using postfix adaptation, based on time T;

estimating throughput for a subsequent frame exchange using prefix adaptation;

estimating throughput for the subsequent frame exchange using postfix adaptation and the postfix data transmission rate; and

selecting an adaptation technique to be used for the subsequent frame exchange based on said estimated throughput using prefix adaptation and said estimated throughput using postfix adaptation.

16. (Previously Presented) The method of claim 15, further comprising:

performing said subsequent frame exchange using the selected adaptation technique.

17. (Previously Presented) The method of claim 15, wherein:

determining a postfix data transmission rate includes choosing a first data transmission rate if time T exceeds a threshold value and choosing a second, different data transmission rate if time T does not exceed the threshold value.

18. (Previously Presented) The method of claim 15, wherein:

determining a postfix data transmission rate includes evaluating an equation that is a function of time T.

19. (Previously Presented) An article comprising a computer readable storage medium having instructions stored thereon that, when executed by a computing platform, result in:

estimating throughput for a subsequent frame exchange in a wireless channel using prefix adaptation, wherein prefix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity before transmission of one or more data frames to the remote entity, said adaptation information including information on how to adapt a data transmit parameter;;

estimating throughput for the subsequent frame exchange in the wireless channel using postfix adaptation, wherein postfix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity after transmission of one or more data frames to the remote entity;

selecting an adaptation technique from a group including prefix adaptation and postfix adaptation for use in the subsequent frame exchange based on said estimated throughput using prefix adaptation and said estimated throughput using postfix adaptation; and

performing said frame exchange in the wireless channel using the selected adaptation technique.

20. (Previously Presented) The article of claim 19, wherein:

estimating throughput for a subsequent frame exchange using prefix adaptation includes dividing an amount of data expected to be successfully transferred during a frame exchange by an expected total duration of the frame exchange.

21. (Previously Presented) The article of claim 19, wherein:

estimating throughput for a subsequent frame exchange using prefix adaptation includes evaluating the following equation:

$$T_{prefix} = \frac{(1 - P_{collision}) \sum L_i . (1 - PER(L_i))}{P_{collision} . D_{RTS/TCTS} + (1 - P_{collision}) . D_{RTS/TCTS/DATA/TACK}}$$

where T_{prefix} is the estimated throughput using prefix adaptation, $P_{collision}$ is the probability that a collision occurs, L_i is the length of the ith packet of data that will be transmitted, $D_{RTS/TCTS}$ is the duration of a channel access request-to-send (RTS)-training clear-to-send (TCTS) sequence,

$D_{RTS/TCTS/DATA/ACK}$ is the duration of a channel access RTS-TCTS-data-acknowledgement (ACK) sequence, $PER(L_i) = 1 - (1 - BER)^{(L_i \times 8)}$ is the probability that a packet of length L_i will be received correctly, and BER is the bit error rate.

22. (Previously Presented) The article of claim 19, wherein:

estimating throughput for a subsequent frame exchange using postfix adaptation includes evaluating the following equation:

$$T_{postfix} = \frac{(1 - P_{collision}) \sum L_i . (1 - PER(L_i))}{D_{DATA/TACK}}$$

where $T_{postfix}$ is the estimated throughput using postfix adaptation, $P_{collision}$ is the probability that a collision occurs, L_i is the length of the ith packet of data that will be transmitted, $D_{DATA/TACK}$ is the duration of a channel access data-training acknowledgement (TACK) sequence, and $PER(L_i) = 1 - (1 - BER)^{(L_i \times 8)}$ is the probability that a packet of length L_i will be received correctly, and BER is the bit error rate.

23. (Previously Presented) The article of claim 19, wherein:

estimating throughput for a subsequent frame exchange using prefix adaptation includes evaluating a number of parameter combinations.

24. (Previously Presented) An apparatus comprising:

a wireless transceiver to transmit and receive wireless signals;

a throughput estimator to estimate the throughput of a subsequent frame exchange using prefix adaptation and the throughput of the subsequent frame exchange using postfix adaptation, wherein prefix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity before transmission of one or more data frames to the remote entity and postfix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity after

transmission of one or more data frames to the remote entity, said adaptation information being information on how to adapt a data transmit parameter; and

a selector to select an adaptation technique from a group including prefix adaptation and postfix adaptation for use in the subsequent frame exchange based on said estimated throughput using prefix adaptation and said estimated throughput using postfix adaptation.

25. (Original) The apparatus of claim 24, wherein:

said selector selects an adaptation technique that has a higher estimated throughput.

26. (Previously Presented) The apparatus of claim 24, wherein:

said throughput estimator estimates the throughput of the subsequent frame exchange using prefix adaptation by dividing an amount of data expected to be successfully transferred during the frame exchange by an expected total duration of the frame exchange.

27. (Previously Presented) A system comprising:

at least two antennas;

a wireless transceiver, coupled to said at least two antennas, to transmit and receive wireless signals;

a throughput estimator to estimate the throughput of a subsequent frame exchange using prefix adaptation and to estimate the throughput of the subsequent frame exchange using postfix adaptation, wherein prefix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity before transmission of one or more data frames to the remote entity and postfix adaptation is a technique where, during a frame exchange with a remote entity, adaptation information is received from the remote entity after transmission of one or more data frames to the remote entity, said adaptation information being information on how to adapt a data transmit parameter; and

a selector to select an adaptation technique from a group including prefix adaptation and postfix adaptation for use in the subsequent frame exchange based on said estimated throughput using prefix adaptation and said estimated throughput using postfix adaptation.

28. (Original) The system of claim 27, wherein:

said selector selects an adaptation technique that has a higher estimated throughput.

29. (Previously Presented) The system of claim 27, wherein:

said throughput estimator estimates the throughput of the subsequent frame exchange using prefix adaptation by dividing an amount of data expected to be successfully transferred during the subsequent frame exchange by an expected total duration of the subsequent frame exchange.